

REVISION: 05

ENGINEERING DATA LIST

* HISTORY *

DATE: 06MAY02

DATA TECH: SCH

ORGN SYMBOL: LGMPM

PR NR:

APPLICATION: KC-135

PAGE 1 OF 2

CAGE: 82918

MANUFACTURER NAME: THE BOEING MILITARY AIRPLANE CO KS

REFERENCE NR: 458-56182-1

NOUN: SUPPORT TUBE ASSY O


NSN: 1620011500027

CAGE	DRAWING NUMBER	REV	NR SHEETS	NR CARDS	TURN CODE	DIST CODE	NOUN	REQUIREMENTS
82918 *	30-3111 (P)	/ C	0001	0000	S		INSERT, ORIFICE OLEO ASSY MLG	
	/02C0340							ECO
82918 *	458-56002 (P)	/	0008	0000	S		FINISH & MFG CONTROL RMTS KC135	ECO
	/98C0236							
82918 *	458-56161 (P)	/ B	0001	0000	S		SUPPORT TUBE - ORIFICE, MLG	
	/W1							ADCN
	/02C0341							ECO
81205 *	458-56182 (P)	/ A	0001	0000	S		SUPPORT TUBE ASSY, MLG	
	/W1							ADCN
	/02C0344							ECO
81205 *	458-56185 (P)	/ A	0002	0000	S		ORIFICE PLATE, FORGING MLG	
	/02C0346							ECO
82918 *	458-56187 (P)	/	0001	0000	S		ORIFICE PLATE ASSY, MLG	
	/W1							ADCN
	/02C0348							ECO
82918 *	60-6551 (P)	/ F	0001	0000	S		RING, PISTON ROD, OLEO ASSY, MG	DATA IS AT OC-ALC JEDMICS
	/02C0349							ECO
	/PER9500							ADCN
82918 *	PL458-56161 (P)	/	0001	0000	S		PARTS LIST	
	/02C0342							ECO
82918 *	PL458-56182 (P)	/	0001	0000	S		PARTS LIST	
	/02C0343							ECO
82918 *	PL458-56185 (P)	/	0001	0000	S		PARTS LIST	
	/02C0345							ECO
82918 *	PL458-56187 (P)	/	0001	0000	S		PARTS LIST	
	/02C0347							ECO
81205	BACN10	/	0023	0000	S		NUT BOBING SPECIFICATION	

REV:		ENGINEERING DATA REQUIREMENTS (ATTACHMENT "A")	
NOTE: MILITARY SPECIFICATIONS /STANDARDS WILL NOT BE FURNISHED IN THE BID SET.			
1. THE FOLLOWING INSTRUCTIONS ARE FURNISHED FOR THE MANUFACTURE OF SUPPORT TUBE ASSY - ORIFICE, SHOCK STRUT ASSY, MAIN LANDING GEAR			
2. PART NUMBER		3. NATIONAL STOCK NUMBER	
458-56182-1		1620-01-150-0027	
4. THE FOLLOWING SPECIFICATIONS/STANDARDS, ETC., WILL BE USED IN LIEU OF THE DATA INDICATED. THE SUPERSEDED DATA WILL NOT BE FURNISHED UNLESS SO INDICATED.			
5. IDENTIFY AND PART MARKING PER MIL-STD-130 IN LIEU OF BAC 5307 AND D18462.			
6. DWG 458-56161, HEAT TREAT PER SAE AMS-H-6088 IN LIEU OF BAC 5602.			
7. ELECTROCHEMICAL ETCH PRIOR TO FINISHING PER MIL-STD-130; AFTER FINISHING OVERCOAT WITH CLEAR FINISH PER MIL-STD-7179 IN LIEU OF BAC 5710 TYPE 41.			
8. ANODIZE PER MIL-A-8625, TYPE II, CLASS 1 IN LIEU OF F-2.959 AND F-12.101.			
9. PERFORM MAGNETIC PARTICLE INSPECTION PER ASTM E 1444 IN LIEU OF MIL-I-6866. USE FULL WAVE DIRECT CURRENT (FWDC), WET CONTINUOUS METHOD, FLUORESCENT TYPE WITH THE FOLLOWING ACCEPTANCE/REJECTION CRITERIA: NO DEFECTS ALLOWED. THE INTENT OF NO DEFECTS ALLOWED IS THAT THE INSPECTION IS CONDUCTED AT THE REQUIRED SENSITIVITY LEVEL AND THERE SHALL BE NO INDICATIONS ALLOWED. THE INSPECTOR PERFORMING THE INSPECTION SHALL BE CERTIFIED TO LEVEL II WITH THE INSPECTION PROCEDURE DEVELOPED BY A LEVEL III AS SPECIFIED IN NAS-410.			
10. PERFORM FLUORESCENT PENETRANT INSPECTION PER ASTM E 1417, TYPE I, METHOD B OR C, LEVEL 3 OR 4 IN LIEU OF BAC 5423 WITH THE FOLLOWING ACCEPTANCE/REJECTION CRITERIA: NO DEFECTS ALLOWED. THE INTENT OF NO DEFECTS ALLOWED IS THAT THE INSPECTION IS CONDUCTED AT THE REQUIRED SENSITIVITY LEVEL AND THERE SHALL BE NO INDICATIONS ALLOWED. THE INSPECTOR PERFORMING THE INSPECTION SHALL BE CERTIFIED TO LEVEL II WITH THE INSPECTION PROCEDURE DEVELOPED BY A LEVEL III AS SPECIFIED IN NAS-410.			
11. APPLY NO FINISH EXCEPT TEMPORARY COATING FOR PROTECTION DURING HANDLING, STORAGE AND TRANSPORTATION PER MIL-C-81309 IN LIEU OF FINISH F-2.10 AND F-1.10.			
12. MATERIAL TO BE ALUMINUM ALLOY PER SAE AMS-A-22771 IN LIEU OF BMS 7-214.			
13. ULTRASONIC INSPECT PER MIL-STD-2154 CLASS A, IN LIEU OF BAC 5439.			
14. HEAT TREAT PER SAE AMS-H-6088 TO 7175-T736 CONDITION.			
15. HEAT TREAT PER SAE AMS-H-6875 IN LIEU OF BAC 5601, TO 125,000 - 145,000 PSI (DWG 30-3111).			
16. THREADS PER MIL-S-8879, SAFETY CRITICAL.			
17. FORM, STRAIGHTEN AND FIT METAL PARTS USING BEST AIRCRAFT INDUSTRY PROCEDURES IN LIEU OF BAC 5300.			
18. APPLY PRIMER TO THREADS PER FINISH SPEC 458-56002.			
PREPARED BY		SYMBOL	DATE
CAROL HYER		LGMPM	18 Apr 02

G P L R

REV:	ENGINEERING DATA REQUIREMENTS CONTINUATION SHEET (ATTACHMENT "A")	
PART NUMBER 458-56182-1	NATIONAL STOCK NUMBER 1620-01-150-0027	
<p>19. THE FORGING SHALL BE PROCURED FROM THE ORIGINAL FORGING SOURCE, USING THE ORIGINAL CERTIFIED FORGING PROCEDURES AND DIES/TOOLING.</p> <p>A. PRIOR TO CONTRACT AWARD, THE DETAILED PART BIDDER SHALL PROVIDE CERTIFICATION, FROM THE FORGING SOURCE, TO THE GOVERNMENT THAT THE CERTIFIED DIES AND PROCEDURES ARE AVAILABLE AND THE FORGING SOURCE HAS AN AGREEMENT WITH THE DETAIL PARTS BIDDER TO PROVIDE FORGINGS FOR THEIR USE IN THE EVENT THEY ARE THE SUCCESSFUL BIDDER.</p> <p>B. PRIOR TO PRODUCTION, FORGING LOT QUALIFICATION SHALL BE ACCOMPLISHED AS SPECIFIED ON THE FORGING DRAWING AND SAE AMS-F-7190 FOR STEEL FORGINGS AND SAE AMS-A-22771 FOR ALUMINUM FORGINGS. THE DETAILED PART CONTRACTOR SHALL ASSURE THAT THIS HAS BEEN ACCOMPLISHED BY THE FORGING SOURCE AND SHALL SUBMIT CERTIFIED DOCUMENTATION OF ACCOMPLISHMENT TO THE GOVERNMENT.</p> <p>20. FORGING SOURCE, CONTROL, AND LOCATION OF DIES:</p> <p>A. FORGING DRAWING: BOEING CORP DWG 458-56185 DIE NUMBER: 12066.3</p> <p>B. CONTROL OF FORGING PROCESS: BOEING CORP</p> <p>C. LOCATION OF FORGING DIE: WEBER METALS 16706 S. GARFIELD PARAMOUNT, CA 90723 PHONE: (562) 602-0260 CAGE: 16472</p> <p>21. SERIAL NUMBER SHALL BE VIBROPEENED, OR STEEL STAMPED, IN 0.09" LETTERS .004" TO .007" DEEP IN THE LOCATION INDICATED. IF THE DRAWING DOES NOT INDICATE A LOCATION, LILE WILL PROVIDE S/N LOCATION INSTRUCTIONS. SERIALIZATION OF ITEM SHALL BE ACCOMPLISHED AS FOLLOWS: THE SERIALIZATION WILL BEGIN WITH THE LETTERS "S/N" FOLLOWED BY THE CAGE OF THE CONTRACTOR NAMED ON THE CONTRACT, FOLLOWED BY A DASH AND THE 2 DIGIT YEAR OF MANUFACTURE, FOLLOWED BY A DASH AND A SEQUENTIALLY UNIQUE 3 DIGIT NUMBER. A CONTRACTOR WHO RECEIVES NUMEROUS INTERMITTENT CONTRACTS WILL START SERIALIZATION OF ITEM WITH THE NEXT NUMBER IN SEQUENCE OF THE PRIOR CONTRACT. IF A CONTRACT PRODUCES MORE THAN 1000 ITEMS, THE SERIAL NUMBER SHOULD BEGIN USING 4 DIGIT SERIAL NUMBERS. THE SERIAL NUMBER SHOULD APPEAR LIKE THIS: "S/N 98747-02-001".</p> <div style="text-align: center; font-size: 48px; margin-top: 20px;">G P L R</div>		
PREPARED BY CAROL HYER	SYMBOL LGMPM	DATE 18 APR 02

REV:		ENGINEERING DATA REQUIREMENTS CONTINUATION SHEET (ATTACHMENT "A")	
PART NUMBER 458-56182-1		NATIONAL STOCK NUMBER 1620-01-150-0027	
<p>22. SPECIFICATION D3-6002, D2-5000, BACD2097, BAC 5005 AND BAC 5009 IS NOT REQUIRED.</p> <p>23. PER DRAWING 30-3111 USE MATERIAL SAE AMS 6382, SAE AMS 6349 IN LIEU OF MIL-S-5626.</p> <p>24. SURFACE TEXTURE PER ASME B46.1 IN LIEU OF ANSI B46.1.</p> <p>25. SHOT PEENING PER SAE AMS-S-13165 IN LIEU OF BAC 5951.</p> <p>26. DIMENSIONS AND TOLERANCES PER ASME Y14.5 IN LIEU OF ANSI Y14.5.</p> <p>27. OO-ALC/LILE SYSTEM ENGINEERING RETAINS ALL RIGHTS TO REVIEW AND ACCEPT MATERIAL REVIEW BOARD'S (MRB'S) DISPOSITIONS PRIOR TO SHIPMENT OF DISCREPANT ITEM. ALL DEVIATIONS, MINOR AND MAJOR, FROM THE ENGINEERING DRAWING PACKAGE SHALL BE SUBMITTED FOR MRB DISPOSITION.</p> <p>28. PRIOR TO CONTRACT AWARD, THE CONTRACTOR SHALL CERTIFY TO THE GOVERNMENT IN WRITING FULL COMPLIANCE WITH MANUALS, SPECIFICATIONS, AND STANDARDS CALLED OUT AND REQUIRED FOR THE MANUFACTURE OF THIS CONTRACTED LANDING GEAR COMPONENT/ASSEMBLY. CONTRACTOR IS RESPONSIBLE TO COMPLETELY SEARCH THESE MANUALS, SPECIFICATIONS, AND STANDARDS AND FULLY UNDERSTAND THE REQUIREMENTS NECESSARY TO MANUFACTURE LANDING GEAR COMPONENTS. ANY QUESTIONS CAN BE FORWARDED TO OO-ALC/LILE.</p> <p>29. AFTER CONTRACT AWARD, THE SUCCESSFUL BIDDER SHALL PROVIDE A COPY OF THE PROCESSING DOCUMENTATION (ROUTING DOCUMENTS AND PROCESS SPECIFICATIONS) TO LILE FOR FINAL REVIEW BEFORE PRODUCTION BEGINS.</p>			
			
PREPARED BY CAROL HYER		SYMBOL LGMPM	DATE 18 APR 02

SOURCE QUALIFICATION REQUIREMENTS
(PL 98-525, SECTION 2319)

STOCK NR (NSN) 1620-01-150-0027

NOUN: Support Tube Assembly

PART NUMBER (P/N) 458-56182-1

AIRCRAFT: KC-135

SECTION C

QUALIFICATION REQUIREMENTS THAT MUST BE SATISFIED TO BECOME A QUALIFIED SOURCE

1. Because of the need for uninterrupted item support to military aircraft systems and in keeping with the requirements of PL 98-525, the current acquisition need not and generally will not be delayed to provide an offerer an opportunity to qualify. Normal acquisition practices at OO-ALC should preclude the denial of opportunity to any interested offerer.
2. The offerer must provide a pre-contract award qualification article, which meets the requirements of the engineering drawings, material specifications, and process specifications. However, successful completion of the qualification testing does not guarantee any contract award. If the offeror is deemed qualified and awarded the contract, a post-contract award first article exhibit may be required to verify production capability.
3. The required materials will be procured from a qualified source and will meet the requirements of their respective specifications. The offerer will assure that the material supplier has accomplished this and will submit certified documentation of accomplishment of the above requirements to the purchaser along with the pre-contract award qualification article.
4. The qualification article shall demonstrate full compatibility and comparability with existing parts, and once submitted, will be subjected to such testing as deemed necessary by the government, to insure the article meets all dimensional, processing, and functional requirements. Such testing may result in the destruction of the article. Following completion of necessary testing and evaluation, the article, no matter what its condition, shall be returned to the contractor or disposed of at his discretion and direction, whether it was found acceptable or not.
5. Form verification: The Government's Quality Verification Center will verify compliance with dimensional data requirements. Material and process compliance will also be verified as required.
6. Fit/function verification: Existing components and Government test stands/fixtures will be utilized to verify physical interface and functional performance of articles.
7. Testing for material and process compliance
 - (a) Material analysis
 - (b) Heat treat
 - (c) Grinding
 - (d) Plating
 - (e) Finish
 - (f) Other
8. Remarks:
 - a. Organic verification capabilities exist at OO-ALC.
 - b. Test requirements outside organic capabilities will be contracted out to independent laboratories.
9. The estimated cost of government testing and evaluation is \$1500.00
10. Maximum time for testing of the qualification article will not exceed 30 days from receipt at testing agency.

SOURCE QUALIFICATION REQUIREMENTS
(PL 98-525, SECTION 2319)

STOCK NR (NSN)1620-01-150-0027
NOUN: Support Tube Assembly

PART NUMBER (P/N)458-56182-1
AIRCRAFT: KC-135

SECTION D

QUALIFICATION WAIVER REQUIREMENTS.

1. An offerer who has had previous experience in the manufacture and qualification of items, which can be correlated with this product, may apply to the design control authority at OO-ALC for a waiver of the above stated qualification requirements.

a. The qualification waiver criteria utilized by the design control authority to perform a qualification analysis are available upon request. The qualification waiver criteria may be used as a guide in preparing the offerer's written input to the design control authority.

b. The burden of proof for written inputs is on the offerer. The design control authority will not pursue authenticity verification of claims made by the offerer of product manufacturing experience with other Government or non-Government agencies. Unsubstantiated claims will not be considered in the waiver analysis process.

c. This waiver will be granted if and only if the design control authority (LILE) can establish the qualifications of the offerer through the evaluation of written inputs from the offerer or from previous knowledge of the offerer's capabilities or from previous experience with the offerer on similar item acquisitions. If there is any doubt about the offerer's capability, the offerer will be required to submit a pre-qualification article. There is no guarantee of qualification by similarity. LILE reserves the right to require a pre-qualification article of all offerers.

2. The current acquisition need not and will not be delayed in order to provide an offerer with an opportunity to meet the requirements for qualification waiver.

3. Maximum time for approval of qualification by similarity will not exceed 15 days.

G. PREPARED BY <i>Ray</i> RAY BROWN LICs DATA MGR	H. DATE 08 MAR 02	I. APPROVED BY <i>[Signature]</i> SHIRLEY J. OLIVER/LICs/CH	J. DATE 08 MAR 02
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INSTRUCTIONS FOR COMPLETING DD FORM 1423

(See DoD 5010.12M for detailed instructions.)

FOR GOVERNMENT PERSONNEL

- Item A. Self-explanatory.
- Item B. Self-explanatory.
- Item C. Mark (X) appropriate category: TDP - Technical Data Package; TM - Technical Manual; Other - other category of data, such as 'Provisioning', 'Configuration Management', etc.
- Item D. Enter name of system/item being acquired that data will
- Item E. Self-explanatory (to be filled in after contract award).
- Item F. Self-explanatory (to be filled in after contract award).
- Item G. Signature of preparer.
- Item H. Date CDRL was prepared.
- Item I. Signature of CDRL approval authority.
- Item J. Date CDRL was approved.
- Item 1. See DoD FAR Supplement Subpart 4.71 for proper numbering.
- Item 2. Enter title as it appears on data acquisition document cited in Item 4.
- Item 3. Enter subtitle of data item for further definition of data item (optional entry).
- Item 4. Enter Data Item Description (DID) number, military specification number, or military standard number listed in DoD 5010.12-L (AMSDL), or one-time DID number, that defines data content and format requirements.
- Item 5. Enter reference to tasking in contract that generates requirement for the data item (e.g. Statement of Work paragraph number).
- Item 6. Enter technical office responsible for ensuring adequacy of the data item.
- Item 7. Specify requirement for inspection/acceptance of the data item by the Government.
- Item 8. Specify requirement for approval of a draft before preparation of the final data item.
- Item 9. For technical data, specify requirement for contractor to mark the appropriate distribution statement on the data (ref DoDD 5230.24).
- Item 10. Specify number of times data items are to be delivered.
- Item 11. Specify as-of date of data item, when applicable.
- Item 12. Specify when first submittal is required.
- Item 13. Specify when subsequent submittals are required, when applicable.
- Item 14. Enter addresses and number of draft/final copies to be delivered to each addressee. Explain reproducible copies in Item 16.
- Item 15. Enter total number of draft/final copies to be delivered.
- Item 16. Use for additional/clarifying information for items 1 through 15. Examples are: Tailoring of documents cited in Item 4; Clarification of submittal dates in Items 12 and 13; Explanation of reproducible copies in Item 14; Desired medium for delivery of the data item.

FOR THE CONTRACTOR

Item 17. Specify appropriate price group from one of the following groups of effort in developing estimated prices for each data item listed on the DD Form 1423.

a. Group I. Definition - Data which is not otherwise essential to the contractor's performance of the primary contracted effort (production, development, testing and administration) but which is required by DD Form 1423.

Estimated Price - Costs to be included under Group I are those applicable to preparing and assembling the data item in conformance with Government requirements, and the administration and other expenses related to reproducing and delivering such data items to the Government.

b. Group II. Definition - Data which is essential to the performance of the primary contracted effort but the contractor is required to perform additional work to conform to Government requirements with regard to depth of content, format, frequency of submittal, preparation, control, or quality of the data item.

Estimated Price - Costs to be included under Group II are those incurred over and above the cost of the essential data item without conforming to Government requirements, and the administrative and other expenses related to reproducing and delivering such data item to the Government.

c. Group III. Definition - Data which the contractor must develop for his internal use in performance of the primary contracted effort and does not require any substantial change to conform to Government requirements with regard to depth of content, format, frequency of submittal, preparation, control, and quality of the data item.

Estimated Price - Costs to be included under Group III are the administrative and other expenses related to reproducing and delivering such data item to the Government.

d. Group IV. Definition - Data which is developed by the contractor as part of his normal operating procedures and his effort in supplying these data to the Government is minimal.

Estimated Price - Group IV items should normally be shown on the DD Form 1423 at no cost.

Item 18. For each data item, enter an amount equal to that portion of the total price which is estimated to be attributable to the production or development for the Government of that item of data. These estimated data prices shall be developed only from those costs which will be incurred as a direct result of the requirement to supply data, over and above those costs which would otherwise be incurred in performance of the contract if no data were required. The estimated data prices shall not include any amount for rights in data. The Government's right to use data shall be governed by the pertinent provisions of the contract.

CERTIFICATION REGARDING THE USE OF RIGHTS TECHNICAL DATA

a. the bidder/offeror certifies that he will observe the following data disclosure and use restrictions on all data claimed to be proprietary to the Boeing Company (hereafter called "Rights Guard Technical Data"):

1. Rights Guard Technical Data shall not be reproduced, in whole or in part, except as required to respond to the Rights Guard Solicitation, or to perform any resulting Rights Guard Contract.

2. Rights Guard Technical Data shall not be incorporated, in whole or in part, into other documentation, nor shall it be otherwise utilized except as required to respond to the Rights Guard Contract.

3. Rights Guard Technical Data shall not be disclosed, in whole or in part, to any other person or entity and shall be disclosed within bidder's/offeror's company only to those employees having a need to know for the purpose of responding to the Rights Guard Solicitation or performing any resulting Rights Guard Contract.

4. All Rights Guard Technical Data will be returned or destroyed by all unsuccessful bidders/offerors promptly upon the award of a contract, and by each contractor promptly upon completion of contract performance. Mylars are not to be returned, but certification that they have been destroyed will be furnished. Simultaneously with the return or destruction of all such data, the respective bidder/offeror/contractor shall provide to the government a certification that all Rights Guard Technical Data has been returned or destroyed, as appropriate. This certification shall contain complete listing by drawing number or document number of the data destroyed. Failure to take such actions shall be grounds for removal of the bidder/offeror/contractor from qualifying bidders lists for all Rights Guard Procurements.

b. CAUTION: The Government will notify The Boeing Company of an actual or suspected breach of the restrictions set forth in this certificate which may come within its knowledge. A violation of such restrictions may be grounds for legal proceedings against the violators by the Government and/or by The Boeing Company.

c. Rights Guard Certifications shall be made a part of the Government's contract file to which the certification pertains. This file and any related documentation shall be made available to The Boeing Company upon request.

Company Name, Address & Mfg Code

Signature

Typed Name.

Date

TE #1

Rights Guard Certifications that contain alterations deletions or additions will not be accepted, and no Rights Guard Technical Data will be transmitted to any bidder/offeror until an unaltered, properly executed Rights Guard Certification has been received by the Government.

TE #2

Any previous unmarked KC-135R Data previously furnished by the U.S. Air Force and not having the "Boeing's Proprietary Rights Legend" on it will be marked with the following legend before use of such data:

Government Purpose License Legend

Contract No. Settlement Agreement in CL. ct.
No. 309-89C

Contractor: The Boeing Company

Government Purpose License Rights shall be effective until otherwise mutually agreed by the government and Boeing.

The restrictions governing use of technical data marked with this legend are set forth in the definition of "Government Purpose License Rights" in paragraph (a) (14) of the clause at DFARS 252.227-7013 (Oct 1989). This legend, together with the indications of the portions of this data which are subject to Government purpose license rights, shall be included on any reproduction thereof which includes any part of the portions subject to such limitations.